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## FIFTEEN CASES OF STRICTURE OF THE URETHRA.<sup>1</sup>

BY EDWARD T. CASWELL, M. D., PROVIDENCE, R. I.

THE following cases of stricture of the urethra have occurred within the last few years, partly in private practice and partly in the Rhode Island Hospital. I regret that the notes of the earlier cases were not more precise. At the present time there is a limited tendency to recur to gradual dilatation as the most available method for the cure of stricture. Setting aside those cases to which this method is entirely inapplicable, my own experience would not lead me to prefer it to the more rapid means I have employed. Whether gradual dilatation or the method of over-distention will permanently cure a stricture so that the patient will be freed from all necessity for using sounds is not, I think, at present established. My experience will show, what in my opinion will prove to be the rule, no matter what method of operation is adopted, that the patient is safe only so long as he continues to pass an instrument at longer or shorter intervals.

CASE I. September 15, 1870. Mr. S. had been aware of the existence of a stricture for a couple of years. Was first seen by me in April, when he had retention of urine. After various unsuccessful efforts I at last succeeded in passing a No. 1 English flexible catheter and drew off the water. The catheter was allowed to remain in for twenty-four hours. At subsequent periods efforts were made to produce gradual dilatation. I however did not get farther than No. 4. English, and the patient's visits were very irregular. I therefore ruptured the stricture on the above-mentioned date with Holt's divulsor. No anæsthetic was used. He complained of but little pain, and only a few drops of blood followed the operation. Subsequently No. 11 English was passed without difficulty. Had no chill. Did well. No subsequent history.

CASE II. S. A., aged sixteen, entered the Rhode Island Hospital in February, 1871. Six years before he had a fall, striking the perinæum upon some hard projecting surface; at that time a physician attempted to pass an instrument, but he failed, and none had ever been passed.

<sup>1</sup> Read at the Quarterly Meeting of the Rhode Island Medical Society, September 30, 1876.

The patient had been in the hands of a homœopathic practitioner. For a year he had suffered from dribbling of the urine, and had worn a urinal. During all that time he said that he had felt the distended bladder. Abscesses had formed and opened in the perinæum, producing urinary fistulæ. He was much emaciated. On admission the bladder was found greatly distended, and an instrument could not be passed further than seven inches. On consultation it was decided to puncture the bladder over the pubes (aspiration was not then as well known as it is now), in the hope that after giving free exit to the urine, and rest to the urethra, some guide might be carried into the bladder. This expectation, however, was disappointed, and after a few days I performed the perineal section without a guide. The operation was exceedingly tedious, owing to the altered condition of the parts, and to the great difficulty of finding the posterior portion of the urethra. After long efforts I found that by pressing upon the bladder a few drops of water showed the urethral opening to the right of the middle line. The rest of the operation was then speedily completed, and a large-sized sound was passed into the bladder. A catheter was retained in this case for some weeks, being changed at proper intervals. The practice, however, is objectionable, and I would not again follow it. The patient had a slight chill and moderate urethral fever, but his recovery was perfect and his control over the bladder complete. A small fistulous opening still exists, through which a few drops of urine occasionally find their way. It causes him so little inconvenience, however, that he has avoided all treatment.

CASE III. Mr. W. May, 1872. Has an old stricture which has existed for nine years. He has at two different times submitted to treatment by gradual dilatation. The stricture is five inches from the meatus and admits only No. 2 English. I ruptured it with Holt's instrument, the patient being under ether. Two hours after the operation he had a severe chill, which lasted but a few seconds. A catheter was left in for twenty-four hours. On the second day he was up, and dressed, and on the fourth he returned to his home in the country. No. 12 was passed on that day, and at regular intervals afterward.

CASE IV. J. W. January, 1873. Rhode Island Hospital. Fifteen years ago he first noticed a diminution in the size of the stream; and at one time he had retention twice in a fortnight. On admission he was found to have retention with stricture at two points. A filiform bougie alone could be made to enter the bladder. The stricture was ruptured with Holt's instrument and a large sound was passed. A catheter was left in twenty-four hours. The patient had no chill and made a rapid recovery. I saw him last July, and found that he had had no return of the trouble, and continued to pass the sound according to directions.

CASE V. J. B. February, 1873. Long standing stricture of gonor-

rhœal origin. Filiform bougie alone passed into the bladder. Ruptured with Holt's instrument. No. 11 English sound passed. Had no chill. Continues well and passes the sound.

CASE VI. P. McG. January, 1874. Rhode Island Hospital. Has two strictures, one at seven inches from the meatus, and the other at four and three quarters inches. Nothing but a filiform bougie passed into the bladder. Ruptured with Holt's instrument. No. 12 sound, English, passed. Had no chill. Made an excellent recovery. No subsequent history.

CASE VII. C. K. January, 1874. Rhode Island Hospital. Patient was about fifty years of age and had long led a most dissipated life. He passed a stream the size of a knitting-needle. I repeatedly failed in attempting to pass an instrument. After several attempts on different days I at last introduced a grooved Syme's staff, as I thought, into the bladder, and with that I rested, hoping to accomplish more on a subsequent day. This operation, however, was followed by severe chills and fever, septicæmia, and death. I supposed that I must have perforated the urethra, but at the autopsy, on the most searching investigation, no laceration of the urethra could be detected. I must say that I always considered the Syme's staff a most dangerous instrument, and I have never used it since the above experience, preferring the tunneled staff with the whalebone guide.

CASE VIII. J. W. January, 1875. Rhode Island Hospital. Had gonorrhœa two years ago, and at times the urine dribbled away. A stricture exists six inches from the meatus. The passage of the smallest-sized bougie caused pain, and was followed by slight hæmorrhage and a chill. Meatus incised, and stricture ruptured by Voilemier's divulsor. No. 12 English passed easily. On the next day the patient had two or three chills, but no farther trouble. Four days after the operation he was up, and well. No farther history.

CASE IX. C. C. January, 1875. Rhode Island Hospital. Gonorrhœal stricture, which has existed for some time. There are two strictures, one admitting a filiform bougie, two and a half inches from the meatus, and the other impassable, five and a half inches from the meatus. The posterior stricture was operated upon by the perineal section, and then, after incision of the meatus, the anterior stricture was ruptured by Voilemier's instrument. No. 11 English passed easily. Had no chill. Made a good recovery. I have recently learnt that this man neglected to pass a sound, and, as the stricture began to contract, it was again ruptured a few months since.

CASE X. J. R. February, 1875. Rhode Island Hospital. As nearly as could be ascertained a stricture had existed for eight years, during the most of which time the stream was not larger than a knitting-needle. Three or four weeks before admission to the hospital, the patient

fell across a bar, striking the perinæum. An abscess formed, resulting in two fistulous openings. There are two strictures, one three inches from the meatus, admitting No. 3 olivary bougie, the other five and a half inches from the meatus, and impassable. The fistulous openings are to the right of the median line, midway between the scrotum and anus. A tunneled sound was passed down to the posterior stricture, and the perineal section was made. The meatus was incised and the anterior stricture ruptured with Voillemier's instrument. No. 12 English passed easily into the bladder. The fistulous tracts were laid open in a large part of their extent. A large-sized catheter was left in for twenty-four hours. The patient had a chill on the night of the operation, and a slight attack of urethral fever, but made an excellent recovery. Some months after, this man had a severe illness which was probably pleuro-pneumonia, and for three months no instrument was passed. He then found that the stream was much smaller, and as he observed that the stream continued to diminish he again entered the hospital in January, 1876. (CASE XI.) I then found that a large sound encountered an obstruction at five and a half inches from the meatus. No. 3 olivary bougie entered the bladder. The stricture was half an inch in length, and a small fistulous opening had formed in the track of the wound. I introduced a whalebone guide, and over it Thompson's divulsor, expanding it in the stricture to nearly its entire extent. A large No. 12 passed easily into the bladder. The patient had no chill, and made a rapid recovery. The water ceased running through the fistula. He left, determined not to neglect his instrument again.

CASE XII. B. L. February, 1875. Rhode Island Hospital. Had gonorrhœa five years ago. A stricture of four years' standing is found at five inches from the meatus, and admits No. 2 bulbous bougie. Ruptured with Voillemier's instrument. No. 12 English passed easily. Had no chill, made an excellent recovery. A year afterwards he had had no return and experienced no trouble, although he had never passed an instrument.

CASE XIII. W. H. C. December, 1875. Eight years since fell upon a beam, striking the perinæum with great force. Passed no water for forty-eight hours, and then nearly all that passed was blood. No instrument was introduced. Three or four days afterwards, while lifting, a large quantity of blood came from the urethra. For a long time the water leaked away more or less. About a year after the accident, the stream was noticeably smaller than usual and was diminishing. A year previous to my examination a swelling occurred in the perinæum resulting in an abscess, which was opened, but through which at that time no urine found its escape. Subsequently fistulous openings formed on both sides of the perinæum. At the time of my examination I found a stricture six inches from the meatus through which I



could only pass a whalebone guide bent at an angle. There was a second stricture three inches from the meatus which would admit a No. 5 elastic bougie. I attributed this anterior stricture to gonorrhoeal origin, but the patient positively denied any such source. A tunneled sound of smallest calibre could not be made to engage in the posterior stricture, and I therefore performed the perineal section upon the whalebone guide alone. The tissues were hardened and almost cartilaginous. After the urethra was opened, Gouley's grooved probe was passed through the stricture, and with his beaked knife it was thoroughly divided. The fistulous tracts were laid open to a large extent. The meatus was then incised, and the anterior stricture was ruptured with Thompson's divulsor. No. 27 French passed easily into the bladder. This patient had no chill and no urethral fever, and was making very favorable progress, when, four weeks after the operation, he was seized with partial paralysis of the lower limbs and complete paralysis of the bladder. The wound healed entirely and he regained control of the bladder. He passes a No. 14 English elastic bougie. The paralysis of the limbs is gradually disappearing under electrical treatment in the hands of Dr. W. F. Hutchinson. The disease of the bladder, consequent upon the long-standing stricture, was possibly the cause of the paralysis. That the latter manifestation should have appeared when the former was on the road to recovery was a fortuitous circumstance, and was alike singular and unfortunate.

CASE XIV. W. H. S. January 6, 1876. Rhode Island Hospital. Two strictures, one admitting a No. 3 elastic bougie, two inches and a half from the meatus, and one at five inches from the meatus through which I could not pass any instrument. A tunneled sound was passed down to the stricture and the perineal section performed, as in the last case, with Gouley's knife and dissector. The anterior stricture was ruptured by Voillemier's instrument. No. 12 English was passed with ease. Patient had no chill. Eighteen days after the operation the water ceased to flow through the wound, and on the 15th of February he was entirely well. This man's case was interesting to me because he seems to possess a peculiar recuperative power. Four years before I had performed upon him, in the Rhode Island Hospital, Chopart's amputation for necrosis resulting from an injury to the foot. In two weeks the wound had entirely healed, and he was discharged. At the present time I had the opportunity of seeing an excellent stump which had done him good service ever since. It did not in the slightest degree come under the reproach which is sometimes cast upon this operation, namely, that there is a tendency to contraction of the tendo-Achillis, and consequently a pointing of the stump.

CASE XV. H. M. January 29, 1876. Rhode Island Hospital. Had gonorrhoea six or seven years ago. Has noticed that the stream was

getting smaller for the last two years. A year ago an unsuccessful attempt was made by a physician to pass an instrument. On his admission to the hospital there was retention and dribbling of urine. There were two strictures, one two and a half inches from the meatus, admitting No. 4 English, the other five and a half inches, admitting only a filiform bougie. A whalebone guide was passed, and over it Thompson's divulsor; the meatus was also incised. No. 12 English was passed into the bladder. The patient had a chill the night of the operation. For the next ten days he complained a little of pain in his stomach and bowels, and had some fever, but on the whole he was doing fairly well. He did not have control of his bladder, and a catheter was therefore passed twice or three times a day. On the 8th of February, in my presence, when sitting up, after having passed water himself, he was suddenly faint, but on lying down and by the use of restoratives he quickly came to himself. Ten minutes afterwards, and while still reclining, he again became unconscious, and immediately expired. I attributed his death to embolism, although none was found at an examination subsequently made. It revealed however extensive disease of the kidneys, the cortical portion being greatly diminished with marked dilatation of the pelves and ureters, and with hypertrophy of the wall of the bladder. With such a condition one would hardly wish to operate, but still it seemed imperative.

To sum up these cases, of the fifteen, there were two deaths, one after the passage of an instrument without operation, and one suddenly, ten days after rupture. There were five perineal sections, three of which were accompanied by fistulæ; three were in cases presenting an anterior stricture which was ruptured, and three of the five were of traumatic origin. Case XIV. claimed that the anterior stricture was of traumatic origin and the posterior from gonorrhœa; I, however, do not include this among the three mentioned above. There were two strictures in seven out of the fifteen cases, and these illustrate the general rule on this subject: where there is but one stricture it is more likely to be located from five to seven inches from the meatus; where there are two the second is most likely to be from two and one half to four inches from the meatus, and the anterior will be of larger calibre than the posterior. Of the fifteen cases in six only was the operation followed by a chill, and in three of these six there were no further indications of urethral fever. I attribute this exemption to the almost uniform practice of administering a large dose of quinine and morphine as soon as the patient comes out of the ether, and to putting him to bed in blankets.

In some of these cases I pursued a practice of which I did not altogether approve, and that is, leaving in a catheter after the operation. I believe it to be unnecessary, but I did not find any evil effects from it.

As to the different instruments used I am inclined to prefer Thompson's divulsor, as it produces the greatest dilatation at the point where it is most needed. In conclusion, I may say that so far as my experience goes, I see no reason for preferring the slow and tedious process of gradual dilatation to the more rapid measures, and in all cases of traumatic stricture, or of stricture complicated with fistulæ, I believe the perineal section affords the most satisfactory results.

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## TWO CASES OF STRICTURE OF THE URETHRA.<sup>1</sup>

BY J. FOSTER BUSH, M. D. HARV.

CASE I. The patient, a man aged thirty-nine, has the following history. When twenty-five years old, in 1860, he contracted gonorrhœa, the symptoms of which, according to his statement, did not come on until six weeks after connection. This urethritis lasted for some three months, and was accompanied by excessively painful chordee. Injections were the chief remedies used. Upon getting fatigued or upon exposure to cold and damp a slight discharge would again come on, not enough to cause alarm or great discomfort, and no action was taken in the matter until three years later, when, having serious trouble in micturating, he consulted a physician, who upon examination detected a stricture in the membranous portion of the urethra. This stricture was divided by the urethrotome; no after-treatment was carried out, and in a short time he was as bad as before, and eighteen months after, in 1865, he was operated upon at Bellevue Hospital, New York. Holt's dilator was used, but, as in the first instance, no after-treatment was followed up, and this operation also proved unsuccessful, the patient in fact being worse off on account of the increased inflammatory action set up. In 1867, two years later, after repeated attacks of retention and a threatened perineal abscess, he entered the Massachusetts General Hospital, where perineal section was performed, and a No. 8 English catheter was fastened into the bladder. The wound healed quickly and he felt decidedly better, and for a time after leaving the hospital passed the instrument that was furnished him, a bougie; but this getting worn out, he destroyed it and did not replace it with another, as he felt perfectly well and the necessity of passing an instrument continuously had not been enforced upon him. In 1871 and 1872 he lived in Kansas, and while there was perfectly free from urinary trouble. In 1873, upon his return to Boston, he began to have at irregular intervals attacks of cystitis and retention, and to relieve the latter he was instructed how to pass an instrument. He remained in a very uncomfortable condition, at times able to be up at work, and at other times in bed, until 1874, when I

<sup>1</sup> Read before the Boston Society for Medical Observation, April 3, 1876.

saw him. He was then suffering from repeated attacks of retention, which were relieved by morphine and by the passage of a small bougie-catheter. After hearing his history I advised another operation, but, his experience of such proceedings being somewhat more extended and varied than that of most men, he declined. I explained to him that the operation was by no means as important as the after-treatment, and that in order for it to do any good, the passage of an instrument must be carefully and persistently followed up. He desired to see Dr. George H. Gay in consultation. This was done on November 16th, and as Dr. Gay agreed with me that surgical interference of some kind was necessary, the patient gave his consent. Ether was administered and Holt's dilator was used. The stricture was very elastic, giving way before the instrument like India-rubber, and although the largest-sized dilator was used it was with difficulty that a No. 6 English elastic catheter could be passed through into the bladder and fastened in. This catheter was allowed to remain in for forty-eight hours, at which time, there being a slight purulent discharge from the meatus, it was removed. For three days no attempts were made to pass an instrument, thus giving the urethra an opportunity to heal. At the end of this time a No. 10 bougie (French scale) was passed without producing much pain. This was done morning and night for a week, using a larger bougie each day until a No. 17 was used. A nickel-plated steel sound (No. 12) was then made. At first there was great pain upon its introduction, but the urethra soon became accustomed to its presence. At first this sound was passed every day, then every second day, and then only once a week. With the practice the patient had had with soft instruments he was soon able to master the sound, and now he passes it every seventh day. It is now seventeen months that he has used it, and he has become so accustomed to it that it causes him no inconvenience, and he declares that it will not be his fault if the stricture troubles him again.

CASE II. The second case is taken, by permission, from the records of the Massachusetts General Hospital, the patient being there while was surgical interne at that institution. It is one of a series of eight divulged with Voilemier's dilator by Dr. Hodges, all having more or less the same history, and all having been operated on once at least before entrance, at which time, however, no after-treatment had been carried out. Almost all entered for relief from retention. Some of the cases were of traumatic origin, but most of them followed gonorrhœa. After operation all were furnished with sounds, were instructed how to pass them, and were cautioned particularly about keeping up the practice, being told that a return of the stricture would take place if they neglected it. They were requested to report from time to time, especially if they experienced any trouble. For a year I was able to trace most of them, and they sent good reports. Two of the cases

live in the city, and they keep up the practice and experience no trouble, as I know from a recent examination. Instead of taking the whole eight cases and reporting them at length, I will take the following, which will answer all purposes for illustration of the principle and save tedious repetition.

G. M., aged forty, while on a foraging expedition during the late war, was thrown from a wagon, striking astride one of the wheels, injuring his perinæum quite severely. He was confined at a field hospital for some time, and had an instrument kept in the bladder. Upon resuming his duties he experienced no great trouble until about a year after, when, fording a stream one wet, autumnal day, he became thoroughly chilled and was attacked with retention. As opiates did not produce the desired effect and as an instrument could not be passed, perineal section was performed by the regimental surgeon. The wound was a long time contracting, owing to unfavorable surroundings, and for quite a period he was troubled with a perineal fistula, which, however, subsequently closed. No after-treatment was enforced. Upon his discharge from the army he came North and lived in New Hampshire. Here at times he would be in perfect health, and at others, as is the case with all subjects of stricture, he would be perfectly miserable. Suffice it to say that he continued in this way, losing flesh and strength, and unable to work much. In one attack of retention, his physician not being able to introduce a catheter or to produce the desired effect with morphia, the patient was tapped over the pubes by the aspirator. This was repeated for three successive days, at the end of which time he entered the hospital, being able then to pass a little water at a time. He was etherized upon entrance, and the introduction of an instrument was attempted; although the greatest care and perseverance were used it was found impossible to do this, for although the bougie was firmly held by the stricture it could not be made to go through. Attempts were therefore no longer made, and the patient was put to bed and kept under the influence of morphia given in the form of suppositories. Three days after this attempt another attack of retention came on, which was relieved by morphia hot baths and the pressure of a bougie against the stricture. The next day ether was again administered, and it was decided if a capillary bougie could not be passed to perform perineal section. This time, however, fortune favored the exertions, a filiform bougie was introduced, Voilemier's rupture-instrument was brought into play, the stricture was divulsed, and a No. 12 English elastic catheter was fastened in as usual. This was removed on the second day, and no passage of an instrument was attempted for some time, as the patient suffered from repeated chills, high temperature, frequent micturition, and purulent urine. When this exacerbation of cystitis had subsided, the passage of an instrument was attempted. At first this was

excessively painful, but soon the urethra became accustomed to it, and the patient was able to pass it himself. He was furnished with a nickel-plated steel sound (English No. 12), was cautioned to keep up the practice, and was sent on his way rejoicing. I heard from him a short time ago. He still uses the sound occasionally, and enjoys excellent health.

These cases are reported simply to illustrate what is already a well-recognized fact, which all the authorities, save Dr. Otis, state in the same emphatic manner. These and many more similar cases from hospital records show a point upon which sufficient stress is not laid, namely, that the operation for stricture of the urethra does no good unless the after-treatment, the continual passage of a sound or bougie, is faithfully carried out, and that if we are not watchful in so doing, the inflammatory action will again get the upper hand and will make the case as bad if not worse than before. The first of these cases shows this particularly well, for previous to the last operation, when this principle was carried out, the patient had had the stricture cut from the inside by the urethrotome, from the outside by perineal section, and had had it divulsed, with always the same unfavorable result. In the second case this passage of an instrument ought to have been particularly enforced upon the patient at the time of the first operation, for his stricture was of traumatic origin, and, owing to its more extended character, it was more likely to contract. Concerning cases of this kind Van Buren and Keyes, in their *Genito-Urinary Surgery*, say: "Traumatic strictures are particularly liable to be sensitive, irritable, and resilient, and usually require harsher means of treatment than ordinary dilatation and the employment of more persistent and intelligent measures to prevent recontraction afterwards than most strictures from other causes. Hence the imperative importance in these cases of insisting upon an intelligent use of the full-sized steel sound, by the patient himself, for an indefinite period of time after a cure, generally for the remainder of life; a task certainly irksome and disagreeable, but no more so and no less necessary than a truss to the ruptured, spectacles to the weak-sighted, an artificial leg to replace the amputated one, and certainly more necessary and less irksome than the daily use of the razor."

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## RECENT PROGRESS IN GENITO-URINARY SURGERY.

BY THOMAS B. CURTIS, M. D.

*The Treatment of Advanced Prostatic Disease.* — A year ago Sir H. Thompson's procedure for the relief of patients suffering from prostatic hypertrophy which has arrived at its last stage, with retention of urine, cystitis, and diminished capacity of the bladder, was described in this report.<sup>1</sup> It consists in the introduction into the bladder, above the

<sup>1</sup> Boston Medical and Surgical Journal, December 30, 1875, page 766.



pubes, of a curved canula, resembling that used after tracheotomy, the object being to provide a permanent opening for the exit of urine, and thus to supersede the necessity of the frequent use of the catheter to empty the bladder. Professor Dittel<sup>1</sup> questions the originality of Sir H. Thompson's procedure, on the ground that the supra-pubic puncture, with or without the preliminary incision, in cases of retention of urine, is an old operation. He says that he is surprised that Sir H. Thompson should "have expressed the opinion that the supra-pubic puncture had not hitherto been resorted to on the Continent for obstruction of the urethra caused by hypertrophy of the prostate." Sir H. Thompson only expressed the belief "that puncture has never been done or recommended with this end in view, namely, to avert death by establishing a *permanent* outlet for urine when the urethra is no longer practicable through disease of the prostate and bladder."<sup>2</sup> Thompson's claim of originality for this operation, which is practiced upon a nearly empty, contracted, and perhaps inextensible bladder, for the permanent relief of obstructive prostatic disease, does not seem to be wholly invalidated by the fact that Dittel and others have often tapped the full bladder above the pubes for the momentary relief of retention, caused by hypertrophied prostate or by stricture. Whatever may be the merits of this comparatively unimportant question of priority, the operation is acknowledged by Dittel to be a useful one. He too, in certain cases, advocates the insertion of an inlying tube above the pubes, to be permanently worn as an outlet for the urine. His way of proceeding differs, however, from that recommended by Sir H. Thompson; the operation described by the latter resembles the high operation for stone rather than the ordinary supra-pubic puncture, inasmuch as he incises the abdominal wall immediately above the pubes with the bistoury, and then opens the bladder on the end of a sort of blunt *sonde à dard*, previously introduced through the urethra into the empty and contracted organ. Professor Dittel claims that he attains the same object in a much simpler way. Having anæsthetized his patient, he forcibly distends the bladder with water, unless it should be capable of being filled by allowing the urine to accumulate. For this purpose he injects sometimes as much as forty ounces of water. He then punctures the bladder just above the pubes with an ordinary trocar, leaving the canula in the bladder during four, five, or six days. At the end of this lapse of time, the parts traversed by the canula having become consolidated, a tubular tract is formed, through which, on removal of the canula, a soft rubber catheter can readily be passed into the bladder. This is permanently secured in place by means of a perforated plate of hard

<sup>1</sup> Wiener medizinische Wochenschrift, 1876, Nos. 22, 23, 24.

<sup>2</sup> Sir H. Thompson, *Clinical Lectures on Diseases of the Urinary Organs*, London, 1876, page 318.

rubber, through the central opening of which the catheter protrudes, being fastened to the margins of the orifice by means of a pin; the plate itself is kept in place by a belt, the extremities of which are fastened to the ends of the plate. Such an apparatus is, however, not indispensable, as means of retention can easily be improvised in various ways, the simplest consisting in the use of a long pin which traverses the catheter transversely at its point of emergence above the pubes, and across the ends of which strips of adhesive plaster are placed.

Professor Dittel takes Saucin to task for asserting that the old-fashioned puncture of the bladder, with the ordinary trocar and canula, must be considered as a superfluous and objectionable procedure, inasmuch as the same object can be attained in a simple and safe way by the use of the aspirator. Dittel admits that the capillary puncture of the bladder may be serviceable as a temporary expedient in cases of acute retention, where the reestablishment of the urethral route may be looked for; but what, he says, can such trifling avail against a retention which is due to an irremovable cause?

*The Curative Treatment of Hypertrophy of the Prostate.* — Professor Dittel of Vienna has made trial of the treatment recently recommended by Professor Heine of Innsbrück,<sup>1</sup> consisting in injections of a solution of iodine into the parenchyma of the gland. The results as described by Dr. B. Howard<sup>2</sup> were exceedingly unsatisfactory. "The patient entered Professor Dittel's wards the 21st of last November with simple hypertrophy of the prostate, was easily relieved by the catheter, and was otherwise in good condition. The case was thought to be a good one for the method in question. Accordingly the solution as recommended by Heine, containing pot. iod. ʒij., tinct. iod. ʒiij., aq. dest. ʒij., was prepared, and four drops of it, at two different times and a few days apart, were injected into the body of the prostate. No irritation or reaction followed immediately, but before the time for the third injection inflammatory symptoms showed themselves. Fluctuation was afterwards detected in the prostate, and the abscess was opened. The inflammation continued to increase and spread; periprostatitis, peri-urethritis, and peri-urethritic abscess supervened, proctitis bringing up the rear of this long, unpleasant train. On the 13th of January it became necessary to perform supra-pubic puncture of the bladder, which afforded not only temporary relief, but induced considerable general improvement, never enough, however, to allow the supra-pubic route to be dispensed with. The battle was fought with bravery and great patience by both surgeon and patient; there was certainly not another case in all the wards, the management of which was so troublesome and tedious. The patient gradually sank

<sup>1</sup> Langenbeck's Archiv, Bd. xv., p. 88; and Bd. xvi., p. 79.

<sup>2</sup> The New York Medical Record, October 21, 1876.

under his many complications, however, and on the 10th of July he died. On examining the prostate I found the seat of two old abscesses corresponding to the points where the injections had been made. The other lesions were recorded as 'suppurative prostatitis, peri-prostatitis, cystitis, pyelitis, and nephritis.' I am informed that in the other instances also in which Professor Dittel has tried this method, abscesses have resulted."

*Injecting the Male Bladder without a Catheter.* — It has been shown by Professor Zeissl<sup>1</sup> of Vienna, and by Professor McGuire<sup>2</sup> of Richmond, Va., that the male bladder can be injected through the channel of the urethra, without the aid of a catheter. This method is especially useful in cases where pain, increased cystitis or urethral fever are likely to be occasioned by the repeated use of a catheter. Injections can be practiced in several ways; either with the ordinary rubber-bag syringe, with the apparatus devised by Dr. E. L. Keyes, of New York, or with any irrigator. Zeissl's procedure is as follows: The patient is placed on his back with the pelvis raised, and the penis is extended on the belly and somewhat stretched, so as to straighten out the urethra. The extremity of the escape-tube of the injecting apparatus, which consists of a bag or vessel filled with warm water, is then introduced through the meatus, and the vessel is raised several feet above the level of the patient's body. In a few seconds, or minutes, the patient feels that the fluid is penetrating into the bladder, the resistance of the urethral walls and of the sphincter being gradually overcome by the pressure of the column of water. Professor McGuire "takes the rubber-bag syringe, ordinarily used to inject the bladder through a catheter, the nozzle of which is provided with a stop-cock, and tapers to a point. The bag is filled with warm water, all the air being carefully excluded, and the nozzle is oiled and introduced into the urethra for an inch or an inch and a half. The urethra is then gently compressed around the nozzle of the syringe, the stop-cock turned, and, by gentle and continuous pressure on the bag, the water is forced along the urethra into the cavity of the bladder. It is important to avoid all rough manipulation, and to inject the fluid slowly; with a little practice the patient can perform the operation quite readily himself."

*Urethral Stricture and its Treatment.* — An important discussion<sup>3</sup> took place in February, 1876, before the Medical Society of the county of New York, in which Dr. H. B. Sands, Dr. F. N. Otis, Dr. R. F. Weir, Dr. J. F. Bumstead, and Dr. E. L. Keyes took part, the subject being certain views relating to stricture which during the last few years

<sup>1</sup> Lyon Médical, April 2, 1876. Practitioner, August, 1876. Prof. S. D. Gross, On the Urinary Organs, Philadelphia, 1876, page 52. Prager Vierteljahrschrift, Bd. ii., 1875, page 62.

<sup>2</sup> The Lancet, October 21, 1876.

<sup>3</sup> New York Medical Record, March 11, 1876.

have been urged by Dr. Otis,<sup>1</sup> with great vigor, perseverance, and ingenuity.

Dr. Otis has shown that the normal urethra is wider than had been generally admitted before the results of his investigations were made known. One hundred urethræ, measured with his urethra-meter, gave an average calibre of 32.95 F. Occasionally urethræ are found exceeding 40 F. Moreover, Dr. Otis asserts that a constant relation appears to exist between the urethral calibre and the size of the penis. This is a fact which he claims to have demonstrated by careful measurements made with the urethra-meter in several hundred cases, without exception being met. The proportion runs as follows: when the flaccid penis measures 3 inches in circumference, the size of the urethra will be 30 millimetres in circumference or more; when it is  $3\frac{1}{4}$  inches, it will be 32, or more;  $3\frac{1}{2}$  inches, 34;  $3\frac{3}{4}$  inches, 36; 4 inches, 38;  $4\frac{1}{4}$  to  $4\frac{1}{2}$  inches, 40 or more millimetres.

Such being his views of the normal calibre of the urethra, Dr. Otis asserts that any diminution, however slight, of the full normal calibre as above estimated, is a stricture requiring surgical treatment. "If," he says, "a urethra presents, the normal calibre of which is equal to a circumference of thirty millimetres of the French scale, and only twenty-nine of bulbous sound will pass without detecting obstruction, then the urethra is not 'about right.' It is strictured to the extent of one millimetre in circumference and can never be a healthy urethra while that stricture remains." Dr. Otis says that stricture is most frequent in the first inch from the meatus, and is less frequent as the distance from the entry increases. He also affirms that gleet is always dependent upon stricture, the latter being always present when gleet is present. With regard to treatment, he asserts that dilatation is at best but a temporary expedient, and that stricture as ordinarily met with is absolutely within the reach of curative measures; that, if completely divided and this division is maintained by suitable means until healing of the parts has occurred, no recontraction can ever take place. He claims that, by this treatment, the complete absorption of the stricture tissue is brought about.

Dr. Otis also entertains views of his own in relation to the meatus, which, he says, is normally as wide as the rest of the canal, and is often, by consequence of contraction, congenital or acquired, the cause of serious urinary trouble. We find, says Dr. Otis, that various and grave difficulties and diseases are occasionally associated with a genito-urinary apparatus where the meatus is not of the full size of the urethra behind it, and that such difficulties are often promptly relieved by a surgical procedure which permanently enlarges the meatus to that size.

<sup>1</sup> New York Medical Journal, April, 1874. Ibid., April, 1876. British Medical Journal, February 26, 1876. The Lancet, June 3 and 10, 1876. Also paper on Stricture of the Male Urethra, its Radical Cure. New York, 1875.

Special instruments have been devised by Dr. Otis for measuring and exploring (the urethra-meter), and for incising (the dilating urethrotome) the urethra, when it is judged necessary. In accordance with his views of calibre and of stricture, Dr. Otis found and incised in one case as many as fourteen strictures. In another case, he performed internal urethrotomy four times, in a urethra through which Voilemier's largest shaft (No. 32) had been rapidly and repeatedly driven. In yet another case<sup>1</sup> in which a No. 34 steel sound could easily be passed without the least force or halting through the urethra and into the bladder, a contraction of the value of six millimetres was revealed by the urethra-meter within one inch of the meatus, the normal calibre in this case being 40, according to Dr. Otis. This "contraction" he wished to divide, but the patient declined the operation, and dilatation was practiced up to No. 40, with relief to the symptoms. These are exceptional cases, showing to what extremities Dr. Otis's views lead.

These opinions and assertions, which have been several years before the profession, were attacked by Dr. H. B. Sands.<sup>2</sup> Speaking first with regard to gleet, he defined the term as signifying "an imperfectly cured or chronic gonorrhœa," and he justly remarked that there is no very clear line of demarkation between gleet and its parent disease. He admits that gleet will often be found to be dependent upon a stricture of the urethra, but he denies that this is the sole cause of the disease, being of the opinion that there are various other causes which suffice to keep up the chronic inflammation of the urethral mucous membrane.

Dr. Sands has investigated the calibre of the urethra with Dr. Otis's urethra-meter, but his results do not accord with those of the inventor of the instrument. "I can discover with it," he says, "no exact ratio between the calibre of the bulb of the urethra, and the circumference of the penis." He further calls attention to the want of uniformity in calibre of different parts of the same urethra, the bulb being the widest or most dilatable part of the canal. "If," he continues, "the calibre of the bulb of the urethra is taken as an indication of what the calibre of all parts of the canal in front of it *ought* to be, I cannot understand why stricture will not frequently be diagnosticated when none really exists. And when it is remembered that not less than fourteen strictures in the same urethra have been supposed to be revealed by this mode of examination, we may reasonably suspect, in the absence of post-mortem evidence, that there is something fallacious in the method employed. In fact, I am convinced that, when a healthy urethra, which has not been previously stretched, is explored either with the urethra-meter or with very large bulbous sounds, the instrument will

<sup>1</sup> Archives of Dermatology, vol. i., No. 3.

<sup>2</sup> New York Medical Journal, March, 1876.

often be tightly grasped at certain points, and communicate to the examiner a deceptive sensation, as if a stricture were present. This may possibly arrive from one of several causes, as for example, a deviation of the sound from the axis of the canal, a spasmodic contraction of the muscular fibres that surround the urethra, or a puckering of its mucous membrane before the instrument. Another explanation is suggested by certain interesting appearances in the urethral casts which I have just exhibited. Instead of presenting a smooth and even surface, they are often marked by slight transverse furrows and alternating ridges, indicating that the urethral mucous membrane, when greatly distended, yields more readily at some points than at others." Sir H. Thompson<sup>1</sup> has recently drawn attention to the fact that the bulbous-ended explorers are very liable to deceive, leading the user to find stricture where none exists. In one of Dr. Otis's cases,<sup>2</sup> a No. 17 F. bulbous sound was "distinctly arrested at the points of stricture," while a No. 25 steel sound could be easily and freely passed through the urethra into the bladder. Dr. Otis called the attention of the society to "the interesting and important fact here demonstrated, that while the bulbous sound No. 17 F. defined the strictures distinctly, No. 25 F. steel sound failed to give any evidence of their presence." The question now arises which instrument deserves most to be trusted.

Dr. Robert F. Weir<sup>3</sup> followed Dr. Sands in the discussion, after the latter had been answered by Dr. Otis, and showed that several of the older authors, namely, Ducamp, Civiale, Reybard, Richet, and others, were acquainted with the great distensibility of the urethra, but nevertheless agree in fixing at a comparatively low figure (21 to 27 F.) the calibre to be regarded as a limit in the treatment of stricture.

"In respect to the treatment of gleet from strictures of large calibre," says Dr. Weir, "the risks from hæmorrhage, urinary fever, abscess, and the more or less permanent curvature of the penis, which is sometimes sufficient to prevent coitus, have always seemed to me to be too great to be lightly resorted to, and especially do I feel convinced on this point since some observations, begun in 1873 and recently resumed, have furnished stronger reasons for this adverse conviction." The same cicatricial curvature of the penis took place in a case which was operated by Dr. Otis in the wards of Mr. Berkeley Hill,<sup>4</sup> of University College Hospital, London, and Dr. Otis admits that out of five or six hundred operations he has seen six cases followed by the crook or curvature described by Mr. Hill, in the worst case persisting about a year. Dr. Otis attributes this result to inflammatory trouble

<sup>1</sup> Clinical Lectures on Diseases of the Urinary Organs, 1876, page 43.

<sup>2</sup> New York Medical Journal, April, 1874.

<sup>3</sup> New York Medical Journal, April, 1876.

<sup>4</sup> The Lancet, April 8, 1876. A Clinical Lecture on the Treatment of Incipient Stricture by Otis's Operation. By Mr. Berkeley Hill.



succeeding the operation, and calls attention to the fact, not stated by Mr. Hill, that the patient operated by himself in Mr. Hill's wards was allowed to leave the hospital and walk several miles after the operation.

Dr. Weir also throws doubt upon the trustworthiness of the indications of stricture afforded by the *bougie à boule*, and quotes Dr. B. W. Richardson, of Dublin, to the effect that it is a deceptive urethral explorer, the use of which may lead to the supposition of the presence of a stricture where none exists. Dr. Weir is therefore of opinion that, inasmuch as certain apparent strictures are really normal contractions, statistics based upon their non-return after division must of necessity not apply to the question of a radical cure of stricture. Without denying the existence of veritable strictures of large calibre, he thinks that our mode of detection of such strictures is as yet imperfect.

Dr. Bumstead, speaking first with reference to gleet and organic stricture, expressed a doubt whether the former invariably depended upon the latter. He advocated urethrotomy as being the best means of treatment for the cure of stricture, having discarded Holt's operation in its favor; moreover, he believed that the operation, when carried to a considerable extent, has, in his hands, been productive of better results than when carried to a lower degree. During the last two or three years it has been his custom to cut up to 35 and 40 F., and the tendency to contract has been much less than before. The same may be said with regard to the habitual use of very large sounds. With respect to slitting up the meatus he was of the belief that it was done altogether too much, as well as cutting the urethra elsewhere, especially by the inexperienced. But he had seen no ill results from slitting the meatus, and did not hesitate to resort to the operation if necessary to effect the passage of an instrument.

Dr. G. A. Peters made some remarks which were rather in support of Dr. Otis's views, and Dr. E. L. Keyes spoke adversely to them.

Mr. Berkeley Hill,<sup>1</sup> in a clinical lecture on the treatment of incipient stricture by Otis's operation, instructs his hearers to avoid the use of instruments in all cases where the gleet discharge is not of long standing, and has not exceeded six months in duration.

*Treatment of Gonorrhœa.* — Dr. Diday,<sup>2</sup> of Lyons, in a work which he says is the "fruit, now ripe, of thirty years of study and experience, sets forth the rules which, according to him, should guide the practitioner in the treatment of gonorrhœa. His opinions upon this subject, if not marked by novelty, nevertheless appear worthy of attention on account of his great experience in venereal disease; we therefore give an

<sup>1</sup> The Lancet, April 8, 1876.

<sup>2</sup> *Thérapeutique des Maladies Vénériennes et des Maladies Cutanées.* P. Diday et A. Doyon. Paris. 1876.

abstract of his precepts. He divides the ordinary course of gonorrhœa into four stages, comprising: a first stage of very short duration, during which the disease may, in certain cases, be made to abort; a second "irrepressible" stage, which commences about the third day, and lasts from four to six weeks, or longer; a third stage, called "repressible," which is marked by symptoms announcing the "maturation" of the discharge; and a fourth, "chronic" stage, in which the disease becomes stationary.

(1.) First stage: characterized by a feeling of warmth during micturition perceived about two and a half days after exposure, and by the appearance of a drop of semi-transparent discharge at the meatus. If at this moment an attempt is made to jugulate the disease success is "possible, and in fact very probable," while, on the other hand, such an attempt, if unsuccessful, involves no harmful consequences. The procedure recommended is an injection of a solution of nitrate of silver, one part in ninety, to be administered by the surgeon. About one drachm of the solution should be injected, the contact of the liquid being limited to the first two inches of the canal, and maintained during five minutes. An hour or two after this injection an artificial urethritis, marked by a thick discharge with scalding during micturition, sets in, and lasts one or two days. In successful cases the discharge then wholly disappears. Failure, on the other hand, is announced after a day or two of apparent cure by the appearance of a purulent secretion, which grows daily more abundant. After such a failure a second attempt at jugulation offers little or no prospect of success. If, however, the discharge has not yet become thickly purulent, with red and swollen meatus, another trial may be made, two injections, each of a duration of five minutes, being made with the same solution as before.

(2.) Irrepressible stage: when the discharge is over three days old, when it amounts to an hourly drop, when pain attends micturition or erection, when the lips of the meatus are red and shiny, all attempts to suppress the disease are for the time being useless and mischievous; useless, because the discharge can only be temporarily suppressed whatever means be used; mischievous, because the drugs upon which we rely, copaiba and cubebs, lose their efficacy by repeated administration, so that, when the time at last arrives at which the disease is amenable to curative treatment, they are liable to fail, unless the susceptibility of the patient to their influence has been economized in view of the third or "repressible" stage. The secret of success in treating gonorrhœa, says Diday, lies in patient expectation throughout this second stage, such expectation being disguised by various *placebos* (demulcent drinks, warm baths, etc.), and supplemented by certain hygienic precautions (abstinence from ale, beer, white wines, spirits; moderation in use of red wines, coffee, spices; avoidance of conjunctival inoculation, and the use of a suspensory bandage).

(3.) Repressible stage: this stage is attained gradually after a mean duration of five or six weeks, sometimes less, very often longer. Not unfrequently two and a half to three months elapse before it is reached. The signs by which its advent is recognized are: the almost entire absence of pain during micturition and erection; the disappearance of the red and swollen condition of the meatus; a considerable diminution of the discharge, which should be no longer yellow or green, but whitish and viscid. This condition being attained, a suppressive medication may be instituted with good prospects of success. Diday's favorite remedy is the *opiat* of copaiba and cubebs. Properly administered, in suitable doses, this drug should, in the course of less than a week, cause the discharge to cease. The administration should be continued during a second week, to prevent recurrence. In many cases, however, some of the many conditions of success being absent or incompletely fulfilled, the discharge still persists after the sixth day. In such case, should the surgeon persist, or should he adjourn his attempts to repress the disease? If the discharge, though diminished to a half or a quarter of the previous amount, is still yellow, making sharply defined spots on the linen, and if the meatus is still red and shiny, if there is still smarting in the urethra, it is better to adjourn, rather than continue, the suppressive medication. Should the results of the first week of treatment, on the other hand, be more favorable, there is promise of a permanent cure being attained by perseverance in the use of the remedy; and Diday advises that the dose of copaiba be increased to the verge of tolerance, together with the use of an astringent injection.

(4.) Stationary stage: this last and chronic stage is the final result of untreated or maltreated gonorrhœa, ill-directed and *inopportune* attempts at early suppression being the usual antecedent in such cases. There is little or no pain; the discharge is of small amount; the disease has become refractory to the use of copaiba and cubebs; and it readily becomes subacute under the influence of irritating agencies. In such cases the main reliance lies in the use of injections, that of Ricord, prescribed as follows, being preferred by Diday:—

R	Zinci sulphatis . . . . .	grs. viii.
	Plumbi acetatis . . . . .	grs. xvi.
	Tincturæ opii, . . . . .	
	Tincturæ catechu . . . . .	ss 3ss.
	Aquæ destillatæ . . . . .	℥iv. M℥.

S. Three injections daily.

Copaiba is no longer useful unless there still remain some traces of acuity, and then only after abstinence from the use of the drug during at least six weeks.

**BARTHOLOW'S MATERIA MEDICA AND THERAPEUTICS.<sup>1</sup>**

IN presenting a new treatise on the above subject, the author claims that his personal observation derived from experimental and clinical study give him the right to publish a new work on the action of medicines, and we must own that his attractive and concise method of generalizing the results of modern literature on this subject add much to the value of his labors. Throwing aside the restraint of the older classifications of remedies, such as the sedatives, irritants, stimulants, astringents, etc., which have been adopted by many writers, he offers an entirely new scheme. He also refers his readers to the United States Pharmacopœia for pharmaceutical information, and to the Wood and Bache Dispensatory for botanical and chemical details of *materia medica*, which he says "are more the province of the druggist than of the physician." Moreover, he states that "the most certain acquisitions of therapeutical knowledge must come through the physiological method," and "that well-established empirical facts should not be omitted, even if they are not explicable by any of the well-known physiological properties of the remedies under discussion."

By the omission of the botanical, chemical, and pharmaceutical details Dr. Bartholow can present the physiological and therapeutical questions of the *materia medica* in a direct and forcible manner, and the reader can devote his attention to them without confusion. Yet we would not advise our medical students to read or study his work without preliminary education in the elements of *materia medica*, as derived from an acquaintance with their physical and chemical properties, and with that part of pharmacy which relates to the compounding of prescriptions, as well as to the preparation of the medicines which are described in the pharmacopœia.

Part first treats of the modes in which medicines are introduced into the organism.

In part second the actions and uses of remedial agents are classified as those used to promote: (1.) Constructive metamorphosis, (2.) destructive metamorphosis; those which modify the functions of the nervous system, and those which cause evacuation from the body. It is somewhat a matter of surprise that Dr. Bartholow omits to classify those agents which effect the central and peripheral circulation of blood. It would seem as if this important field of physiology had no separate place in his physiological scheme. Certainly the position it occupies in the department of physiology hardly warrants the omission.

The brief but comprehensive description of the methods of medicinal administration is admirably suited to the wants of the medical student and young practitioner, especially when it is compared with the lengthy and confused treatment of the subject pursued by other writers.

Dr. Bartholow rightly, we think, introduces the alimentary substances as remedial agents; in fact he could hardly do otherwise, if he would treat of constructive metamorphosis. Water is classified as a restorative agent, and we are pleased to see such sensible views in regard to its abuse, which produces im-

<sup>1</sup> *A Practical Treatise on Materia Medica and Therapeutics.* By ROBERTS BARTHOLOW, M. A., M. D., etc. New York: D. Appleton & Co. 1876.

pairment of the digestive organs and "*ice-water dyspepsia*, a very common malady in the United States." The succinct way in which the author has summarized the therapeutical applications of water, as an internal and external remedial agent, is most excellent, and deserves to be read by every practitioner of medicine. There is no discussion as to its merits in any specified disease, but simply a description of the effects on certain symptoms which may be met with in many diseases, and advice is given as to when the use of the bath promises most.

On first thought we may be somewhat surprised to find pepsine spoken of as an aid to constructive metamorphosis, but on reflection its place as a restorative agent cannot be disputed. We cannot but admire the concise and intelligent explanation of the value of cod-liver oil as a restorative agent and promoter of constructive metamorphosis, and the cautious statement that "the remedy is too often prescribed without any reference to the condition of the patient's digestive functions."

These and similar expressions of individual opinion strengthen our confidence in recommending this treatise to the younger practitioner of medicine, for he would not be so likely to glean from other text-books so many practical hints in the treatment of ordinary disease. The older practitioners might, and perhaps with good reason, question the validity of the theories of the action of certain remedies; but if we consider theories simply as working formulæ for the solution of disease symptoms, no one can object to their maintenance so long as they seem correctly based; and it must surely be admitted that the treatment of diseases by the theoretical *modus operandi* of drugs will speedily determine the fallacies inherent in the theory, and will not hinder the recovery from those diseases. The method of unwise treatment of symptoms most assuredly masks the history of the various diseases, and may delay natural recovery.

To illustrate the fact that Dr. Bartholow has not sacrificed his subject by his succinct statement, we would adduce what he says in regard to the indications for the use of tannic and gallic acid on page 223.

The young practitioner of medicine may be well pleased with the numerous prescriptions which occur in the text.

We cannot attempt, in the space allotted us, to criticise Dr. Bartholow's volume in detail. Its method is so different from other and older text-books that the freshness makes its reading very attractive, and the style, while very positive in statement, is very intelligible. For illustration, let any one whose mind has been too often confused by the detailed explanation of medical electricity met with in specific treatises, read the thirteen pages on this subject by our author. In a few words he explains the origin of electrical phenomena from chemical action, the positive and negative currents, the closed and open circuit, and the resistance of the circuit. While on this part of his book we cannot refrain from commending Dr. Bartholow for leaving off the record the details of his electrical experiments on the brain of a woman exposed by an epithelioma, and for his avoidance of a discussion in regard to the electric excitability of the cerebral hemispheres, which is at present an open question.

We will close our review of this work by a description of the method of

arrangement for each drug. First, the name of the drug is given, and then follow its various pharmaceutical preparations and chemical compounds; second, its composition; third, its administration; fourth, its antagonists and incompatibles; fifth, what are called its synergists; sixth, its physiological actions; seventh, its therapy; and last, the authorities to which the writer refers.

We would call attention to the brief classification which Dr. Bartholow gives to the various well-known natural spring waters of our own and foreign countries.

A.

### FAGGE'S CATALOGUE OF MODELS OF DISEASES OF THE SKIN.<sup>1</sup>

THE author of this interesting volume, well known as the translator in part of Hebra's work for the Sydenham Society and through other valuable contributions to dermatology, has been curator of Guy's Museum for three years. During this period he has been rearranging the very large collection of models of cutaneous affections in its possession and preparing this catalogue. The matter of the arrangement of the specimens, or in other words the system of classification to be thus illustrated, was a difficult problem, which Dr. Fagge has not attempted to solve upon a scientific basis; indeed, he believes such an arrangement to be an impossibility. He has contented himself, therefore, with dividing the diseases into what appear to be natural groups: the inflammatory affections; the non-inflammatory diseases without destructive tendencies; the same with destructive tendencies; affections of the appendages and glands of the skin; and parasitic diseases. The volume contains, in addition to the very full descriptions of the specimens (537 in number), the clinical histories of a large portion of the cases they represent, and brief but valuable observations upon the nature of the various affections in their order, which together make up an admirable treatise on modern dermatology.

### FOX'S EPITOME OF SKIN DISEASES.<sup>2</sup>

THIS little book, a brief epitome of the large and well known work of the senior author, is meant to be a sort of pocket-book for ready reference for student and practitioner. It contains, first: introductory observations on the nature and causes of skin diseases; a description of the various cutaneous lesions and a so-called diagnostic chart; a system of classification; and general remarks on diagnosis and treatment; and, second: condensed descriptions of all affections of the skin, alphabetically arranged with directions for their treatment by references to a table of formulæ, which makes up part third of the volume.

The book has been well prepared and contains in a concentrated form a

<sup>1</sup> *Catalogue of the Models of Diseases of the Skin in the Museum of Guy's Hospital.* By C. HILTON FAGGE, M. D. London: J. & A. Churchill. 1876. Pp. 269.

<sup>2</sup> *Epitome of Skin Diseases.* By TILBURY FOX, M. D., F. R. C. P., and T. C. FOX, M. R. C. S. Philadelphia: Henry C. Lea. 1876. Pp. 120.



great deal of essential and practical matter, but its legitimate sphere of usefulness must be a narrow one. As a work of instruction it can be of service to those only who are already fully educated in dermatology; it cannot, therefore, take the place of the text-book in the hands of the student. Its greatest demand will naturally be among those busy practitioners who like to get immediately at what they call the practical kernel of a subject.

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## PROCEEDINGS OF THE SUFFOLK DISTRICT MEDICAL SOCIETY.

A. L. MASON, M. D., SECRETARY.

OCTOBER 28, 1876. Fifty-seven members were present, DR. WILLIAMS, the president, in the chair. The records of the last meeting were read and accepted.

DR. G. W. GAY showed a specimen of dermoid cyst removed a week before, and gave the history of the case and operation, remarking that it was still rather early to tell what the result would be, though the indications were favorable. The patient was in the City Hospital, isolated as far as possible. In answer to an inquiry by Dr. J. Homans regarding the size of the abdomen, it was stated to be about as large as at the fifth or sixth month of pregnancy.

The case will be published in full at its termination.

DR. JOHN HOMANS showed a patient, a man thirty-four years old, both of whose femoral arteries had been tied for popliteal aneurisms. The right femoral was tied on February 2, 1874,<sup>1</sup> and the left, in January, 1876. The remains of the last aneurism could be still seen and felt in the left popliteal space as a hard, oval tumor, without pulsation, about the size of a large horse-chestnut. The patient worked steadily from March, 1874, until January, 1876, when he was obliged to give up on account of pain and swelling in the left ham and leg. He had detected the aneurism, and presented himself for operation. The pulsating tumor was about the size of a man's fist. No pulsation could be felt in the anterior or posterior tibial arteries, and none was now perceptible in either leg. The first ligature came away on the twenty-first day, and the second on the forty-second. The patient went to work before the last one came away, and has worked steadily ever since. He complains only of numbness in the feet after walking, a symptom which was noticed for a few months after the first operation.

DR. H. O. MARCY reported a case of fracture of the patella, with treatment by a new method. The paper is reserved for publication.

With reference to Dr. Marcy's splint, DR. AYER mentioned the case of a patient, two hundred pounds in weight, whom he had treated with excellent result, some time ago, for fractured patella, by means of a similar apparatus made of wood instead of plaster, the invention of a French surgeon.

Dr. Ayer also spoke of a case of fractured olecranon which he had treated with adhesive plaster applied in the form of a figure eight, and a straight splint with bandages. The splint was removed in twelve weeks, when there

<sup>1</sup> JOURNAL, June 18, 1874, page 589.

was no evidence of separation and every appearance of bony union. In a second case there was entire recovery of the use of the arm in twelve months.

DR. MARCY reported a case of fracture of the olecranon, occurring in the practice of Dr. Hildreth, in which there was a space of two inches between the fragments. It was treated in a similar manner, by adhesive straps and a plaster-of-Paris splint, with apparently perfect union.

DR. J. HOMANS said that he had lately tried plaster-of-Paris bandages in posterior angular curvatures of the spine occurring in Pott's disease, and that he had found Dr. Sayre's method of raising the patients, by means of hooks under the arm and pulleys, too painful. Dr. Homans thought it better to have them raised by attendants, who applied the lifting power to the arms, the back of the head, and the chin.

DR. MARCY had found a ring attached to adhesive plaster bearing upon the back of the neck and head a satisfactory method. He had used the bandages recommended by Dr. Sayre in twelve cases with very good results, once in the case of a woman who was six months pregnant.

DR. J. HOMANS said that he had found it necessary to insert something which might be removed in the region of the stomach to allow for distention after eating.

DR. AYER reported a case of pneumonia of the right side which had gone on favorably to convalescence on the eighth day, when the breathing was easy and the cough slight. Delirium tremens then set in, and the patient, who had been in the habit of drinking about a pint of Medford rum daily, died in eighteen hours. Sedative remedies gave no relief.

DR. WEEKS inquired to what extent members of the society had observed interchangeability between erysipelas and puerperal fever, mentioning a case of facial erysipelas which occurred in a newly-delivered woman, in whom there were no signs of any morbid puerperal process.

DR. W. J. MORTON said that at the Cape of Good Hope, in a town of ten thousand inhabitants, there had lately been simultaneous epidemics of erysipelas and of puerperal fever, with many deaths from the latter disease. The connection between the two diseases was not evident, and Dr. Morton had seen two isolated cases of puerperal fever, one fifty and the other sixty miles away from any town, up the River Vaal, and apparently out of reach of any local causes.

DR. PATTEE had observed six cases of labor in houses where there was acute erysipelas. No puerperal fever had followed.

DR. MORTON exhibited a new thermo-cautery invented by Dr. Paquelin, and made by Charrière, of Paris. By means of an India-rubber bulb the vapor of petroleum or of some other hydro-carbon is forced through the tube and handle to the platinum point, which is first heated over a spirit lamp. A white heat is soon produced, which is easily maintained during operation by the current of vapor, and may even be reproduced after immersing the point in cold water. A sufficient degree of heat is maintained much better than by the galvanic battery; in short, this instrument supplies the place of the actual, the gas, or the galvano-cautery, and is a comparatively cheap substitute. The cost was about thirty dollars. Instead of petroleum vapor, sulphuric ether was used by Dr. Morton, but it was not so satisfactory.

DR. J. C. WARREN said that he had used this instrument the same day in a case of hæmorrhoids, and had found it extremely convenient and better than any that he had ever used. A finer platinum point was thought desirable.

DR. E. G. CUTTER showed a specimen of fracture of the right side of the vertical portion of the frontal bone, with depression. An intemperate woman, fifty years of age, was struck on the head by her husband, during an altercation, with a gallon milk-can three quarters filled with water. A compound fracture was produced. With the exception of a slight amount of pain at the seat of injury there were no symptoms of note till the sixth day after. Then there were occasional vomiting, slightly accelerated pulse and increased temperature, pain in the head near the wound, sleeplessness, and anorexia. The pupils were normal, and there was no paralysis, and no disturbance of special sense. On the seventh day the pulse and temperature were higher, the mind was more sluggish, and the patient was somewhat drowsy. On the eighth day she became comatose and could not be roused to consciousness. She muttered unintelligibly on being shaken. The face was pale. The pupils were equal, somewhat dilated, and responding slowly to light. The pulse and respiration were irregular, the former feeble. There was no paralysis. Death took place early on the ninth day. The patient and her friends repeatedly refused hospital treatment, and drugs prescribed to meet indications were not taken. The place where the patient lay was a damp, dark, unventilated back basement on Cove Street. The treatment consisted in washing out the wound twice a day with lukewarm water, approximation of the edges with adhesive plaster, and the insertion of something to serve the purpose of drainage, which, however, was rendered ineffectual by the patient's persistently sitting up in bed.

At the autopsy, the fracture was found to be half an inch to the right of the median line and about an inch and a quarter anterior to the right coronal suture and parallel to it in its course. Its length was very nearly an inch and three quarters, its width three quarters of an inch, and its shape elliptical. Both tables were depressed, the inner one perhaps one quarter of an inch, with a Y-shaped fracture at its most prominent part. There was a small, dark-red, somewhat firm clot one inch by one quarter of an inch in size on the ecchymosed dura mater beneath the site of the wound. There was general meningitis, more marked under the seat of injury, sub-arachnoid effusion and effusion of cloudy serum into the ventricles. On cutting through the pia mater a clot was found half an inch long and a line in diameter lying in the substance of the brain, which was softened and reddened through the gray matter into the white, about half an inch deep and three quarters of an inch long. There were many capillary ecchymoses in the brain tissue near the softened spot. The rest of the brain presented nothing remarkable. There was no lesion at the base of the brain opposite the wound. The examination of the rest of the organs presented nothing worthy of note.

## WILLIAM WALLACE MORLAND, M. D.

THE news of the death of Dr. Morland, on November 25th, will be received with deep and sincere regret not only by the profession of his city and State, but by numerous friends throughout the country. Born at Salem in 1818, he entered Dartmouth College at the age of sixteen, and graduated in 1838. Three years later he obtained his medical degree at Harvard, and went abroad to continue his studies. On his return to Boston he practiced with success, but found time to indulge his taste for scientific study. In 1855 Dr. Morland and Dr. Minot were associated with Dr. J. V. C. Smith, who had long held the position of editor of this JOURNAL. Under the competent management of the new editors the JOURNAL rapidly improved, and, Dr. Smith resigning two years later, they edited it alone with increasing success till their resignation in 1860. When the City Hospital was opened, at the beginning of 1865, Dr. Morland was appointed visiting physician, which position he held for some five years. For nearly twenty years he has held the important office of medical examiner for the New England Life Insurance Company. He wrote a book on Diseases of the Urinary Organs, which appeared in 1858 and was very well received. In 1866 he won the Fiske prize by an essay on Uræmia. He contributed many articles to our pages, and was an excellent reviewer, acute, sound, and interesting. His paper on Florida and South Carolina as Health Resorts, which appeared in the JOURNAL in 1872, was the best and the best known of his smaller writings. His excellent advice to "follow the strawberries" will, we believe, save many an invalid from losing the benefit of a winter's exile by a premature return. The terse good sense of the expression is characteristic of its author. As a man and a physician Dr. Morland was alike excellent; of much learning and ability joined to the most charming and unpretentious manners. Grief for his loss will be as sincere as it is general.

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MEDICAL NOTES.

— Dr. William L. Richardson, Inspector for the Boston Board of Health, is to be present at the cremation of the remains of Count Palm at Washington, Pennsylvania, on the 6th of December.

— A new epidemic of small-pox seems to have made its appearance in London. After the severe epidemic in 1871-72, says the *Medical Times and Gazette*, the disease rapidly disappeared till it had so died out that not a single death was recorded from it in the month of January of the present year. In February there were three deaths from it, and in March seven, and altogether during the first six months of the year thirty-three deaths from it were recorded. Since June the increase has been more rapid, so that between the end of that month and the end of September one hundred and ten deaths were registered as having been caused by small-pox in London. The weekly tale of deaths has not, however, varied greatly during the last six weeks, the numbers having been sixteen, eleven, fifteen, eleven, sixteen, and twenty-two,

the last being a higher number than in any previous week since July, 1872. The editorial further says, "the statistics we have given leave no room for doubting that we are in the beginning of a new epidemic of small-pox, or, in other words, of one of those cyclical increases that recur with such irregular regularity as to remind us how imperfectly we still employ the known means of preventing the recurrence and spread of the disease, which means are isolation and vaccination and revaccination."

— The Surgical Notes of the War in the East, by William MacCormac, F. R. C. S., published in *The Lancet* of October 14, 1876, contain many points of interest. In speaking of the Belgrade hospitals the writer says, "One case serves to illustrate the antipathy to operation entertained by the Servians. . . . I found, in the hospital of the Serbische Frauen Verein, a nice-looking lad of eighteen years, with a gunshot fracture of the head of the humerus, caused by a fragment of a shell. A considerable wound existed on the front of the joint; the head of the humerus was shattered; some fragments of the bone were quite loose; counter openings had been made behind; the upper end of the broken shaft was drawn up and pressing against the brachial plexus, thus causing excessive suffering. The suppuration was profuse, yet neither the poor lad himself, nor his father and mother, who were with him, would hear of anything being done."

In Semendria two interesting cases are reported to have been seen. One was a considerable gunshot depressed fracture of the anterior superior angle of the right parietal bone. The depression amounted to more than half an inch; but when Dr. MacCormac saw the patient, ten days subsequent to the injury, there had been no symptoms. The surgeon thought he might be blamed for not having trephined, but Dr. MacCormac very much commended him for not doing so, and not yielding to his inclination to operate. It was difficult, however, to persuade him to syringe out the wound with some cleansing lotion. He was afraid he might thus injure the brain, and preferred getting the man to hang out of bed with his head downwards, and so permit the very bad-smelling pus to escape from the rather deep wound.

Another case was one in which the bullet entered through the right temple behind the eye, and was believed to have traversed the posterior part of the floors of both orbits. The vision in the right eye was impaired, but the left eye was in a condition of exophthalmos, and the cornea opaque. The direction and depth of the wound appeared to indicate that the bullet, which had not emerged, lay somewhere behind the left eye, in which it had excited destructive inflammation.

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#### LETTER FROM WASHINGTON.

MESSRS. EDITORS, — We are now in the midst of lovely fall weather, welcoming the return of our residents from their summerings, counseling those whom Centennial experience has used up, who find themselves with their digestive organs out of order and with vague, and to them unaccountable, muscular

pains, which they fear may be the precursors of that terrible typhoid fever so talked of outside of Philadelphia. We are also busying ourselves with college, hospital, and society work, all of which is now in running order. In politics, the absorbing topic of the hour, we must perforce take interest, but it is purely selfish, and resolves itself into the question, Shall we gain or lose patients by the change? With no vote, no representation, and, in the main, with no part whatever in the political discussions of the day, the Washingtonian catches the contagion only from outside influences. On the other hand, during the term of an administration, he learns to appreciate the attractive personal qualities of those in place for the time being, without the obtrusion of political principles, so that a change is always to be regretted. A practitioner of recent date advocates a change for the reason that when he commenced practice the office holders by whom he was surrounded all had their family physicians. Now in a new deal he may stand a better chance.

Whilst referring to Centennial malaise we might mention a case in that connection with some peculiar symptoms, namely: A married man, about fifty, a generous liver, but not dissipated or under suspicion of syphilitic taint, some three days after his return from a visit to the Exhibition, is affected with diffused redness of the forehead and upper part of the face, with swelling most marked under the eyes, accompanied by a burning sensation, restlessness, fever, and loss of appetite. After an apparent incubation of two days longer, an eruption appears first upon the forehead, then along the border of the hair around the back of the neck, over the scalp and upon the face, in free and successive crops of pustules resembling those of variola so closely that at first precautions were taken to guard against contagion. Two or three isolated pustules appeared upon the hands and arms, about the elbows, and two upon the nates, but none upon the body elsewhere. The back, breast, abdomen, thighs, legs, and forearms were free from them. Some of these pustules matured, and were of full size, comparable to those of variola, while others aborted. There was no marked umbilication, and some partook of the nature of furuncles. Two or three, those on the elbows, took on the character of broad ecchymotic spots. These successive crops were over four weeks in making their appearance, maturing in three days and subsiding, leaving behind a slight bluish elevation, which wore away only after the lapse of considerable time. Even at the end of the fifth week a few of these pustules appeared. During the prevalence of the eruption there was little or no constitutional disturbance, the fever subsided entirely, and marked debility was the only sequel. This occurred in the summer time, and a new straw-hat had been purchased during the visit. The straw rim irritated the forehead, abrading the skin slightly; perspiration was free, and the lining band was of colored leather. The favorite seat of the pustules exactly corresponded to the pressure of this lining around the head. Unfortunately, no examination was made of the lining, as it had been thrown away by the hatter to whom it had been sent for alteration.

The profession here has sustained a severe loss in the death of Dr. William P. Johnston, who died October 24th in his sixty-fifth year. He was a physician of upwards of forty years' practice in this district, educated in Paris, and



unceasingly active in the practice of his profession ; indeed, in the opinion of his associates he wore himself out in the service, dying of an affection of the heart. He probably had the largest and best practice, for the two do not always go together, of any physician in Washington at the time of his death. He was for a number of years professor of obstetrics in the National Medical College, and was personally interested in the various hospitals and benevolent institutions of the city. When this can be said of a man it naturally follows that he must have had many friends outside of the profession who feel his loss keenly ; and one, in giving expression to his feelings in the daily papers, while emphasizing the confidence patients had in laying their most secret matters before Dr. Johnston, unfortunately so worded his expressions as to convey an apparently unfavorable impression of other medical men. This led to a long and very pleasant article on the doctors, in an editorial of another of our newspapers in their defense, which concludes with the remark that their only failure to advance lay in the collection of fees, they being too remiss in collecting or charging enough. If this be a sincere expression from one of the laity, we may hope for better days pecuniarily. Dr. Johnston, like many of our over-busy men, has left but little behind him in our pages of medical literature. He leaves a son, who from his thorough education and assiduous attention to his profession gives full promise of rivaling his father in professional ability, but it would be hard to rival his ready smile, courteous manner, and sympathetic attention.

Dr. Billings has left us for a short trip in Europe, to look after the interests of his library (that is the most satisfactory way of putting it as the outgrowth of his efforts, although it is called the Library of the Surgeon-General's Office), and of his projected course of lectures in the Johns Hopkins University. He is receiving attentions from the profession in England which are highly flattering to him and to those whom he represents. It is to be hoped that the medical press will benefit by his foreign observations.

The colleges have opened for the winter with a fair showing of students in attendance, not sufficient to make one wildly enthusiastic, perhaps, but yet encouraging. The medical department of the Columbian University remains unchanged. The medical department of Georgetown University commences anew, as it were, all the members of its faculty being new men. We are to have a fourth medical college for our benefit, a Woman's Medical College, the faculty of which, it would seem, have not yet been selected. Dr. Mary Walker, who is practicing here, is not connected with it, and so far we know but little of its *personnel*.

A step of considerable importance has recently been taken by the medical association in re-admitting Dr. Bliss to membership. The association claims the right to govern the relations of members with each other as to consultations, etc., and some years ago saw fit to dismiss Dr. Bliss on grounds which it is not necessary to recapitulate here. The doctor admitted the justice and force of the discipline, acknowledged his errors, and asked to be restored to his former privileges, which, by this act, was granted. This relieves one member at least from personal embarrassment, but it goes beyond this simple personal-ity in its principle. At the time Dr. Bliss was re-admitted to membership he

was, and is still, a member of the board of health, in affiliation with Dr. Cox, who is not recognized by the association, and with Dr. Verdi, who is a homœopath, both being also members of the board of health. This, then, puts the present board of health upon a different footing from that which it before held.

Since our last letter the published extracts from the report of the committee of investigation referring to Dr. Nichols and his management of the Government Hospital for the Insane have so fully vindicated that gentleman and fulfilled our predictions that it seems scarcely necessary to refer to it.

The medical society has resumed its meetings with matters of interest before it, but as it publishes its bulletin at such regular and short intervals it would seem improper to anticipate it in any way. The society has, however, made an attempt, by appointing a committee for the purpose, to secure some representation before the congressional district committees, oftentimes a very useful and important precaution. Bills are sometimes brought up before Congress, and are upon the eve of their passage before we are made aware of their existence, that are of great importance to us as a profession, as for instance the recent attempt of the so-called surgical institute; had it not been that its wide scope affected the whole profession outside of the district, it is a question as to how far we could have restrained its influence.

HOMO.

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COMPARATIVE MORTALITY-RATES FOR THE WEEK ENDING NOVEMBER 18, 1876.

	Estimated Population, July 1, 1876.	Total Mortality for the Week.	Annual Death-Rate per 1000 for the Week.	Death-Rate for the Year 1875.
New York	1,061,244	415	20.33	29.35
Philadelphia	825,594	324	20.41	22.24
Brooklyn .	506,233	171	17.37	24.92
Chicago . .	420,000	187	23.15	19.75
Boston . .	352,758	126	18.58	26.20
Providence	101,500	29	14.86	19.02
Worcester .	51,087	15	15.26	20.91
Lowell . .	51,639	16	16.11	20.55
Cambridge	49,670	16	16.75	23.31
Fall River	50,372	13	13.42	23.99
Lawrence .	36,240	11	15.78	25.96
Lynn . .	33,548	14	21.70	19.23
Springfield	32,000	4	6.50	20.93
Salem . .	26,344	8	15.79	22.92

Normal Death-Rate, 17 per 1000.

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BOSTON SOCIETY FOR MEDICAL OBSERVATION. — A regular meeting of the society will be held at its rooms, No. 36 Temple Place, on Monday evening next, at eight o'clock. Dr. Fisher will read a paper on Delusion, of a Week's Duration, induced by Heat-Stroke.

BOOKS AND PAMPHLETS RECEIVED. — The Functions of the Brain. By David Ferrier, M. D., F. R. S. With numerous Illustrations. New York: G. P. Putnam's Sons. 1876. (For sale by A. Williams & Co.)